

generally radially spaced one from the other along a pressure side wall portion of the coupon; and a trailing edge having a plurality of radially spaced openings connected to a radially extending plenum; and finally, a plurality of radially spaced ribs extending between opposite pressure and suction sides of the coupon; the ribs shaped to form radially spaced flow channels for directing cooling air to the plenum. The Examiner acknowledges the failure of the cited prior art in this regard, concluding simply that it would have been obvious to one of ordinary skill in the art to include the film cooling holes and radially spaced openings in a trailing edge repair coupon since such cooling holes/openings have been utilized in the past on turbine nozzle air foils in general. In other words, those structural distinctions that serve to distinguish the present invention over the prior art do not appear in the prior art cited and relied upon by the Examiner, either individually or in combination. In this regard, the Examiner's attention is directed to paragraph 3 of the specification that reads as follows:

Turbine air foils have also been previously repaired by replacing damaged trailing edge portions with a new replacement trailing edge portion. The coupons which constitute a replacement trailing edge portion for a nozzle airfoil have previously been welded to the remaining leading and intermediate sections of an airfoil where the damaged of the trailing edged sections of the airfoil have been removed. The trailing edge coupons, however, have not heretofore been utilized to significantly extend the operating life of the turbine airfoil as they have lacked the required cooling configurations.

The specification goes on to disclose that coupons having similar trailing edge sections as used in the existing turbines can be (and have been) utilized as replacements for damaged trailing sections, but the hours of operational capability of the repaired nozzle airfoils have not been significantly extended because they do not incorporate the film cooling holes/openings as described in the application. Thus, use of the novel trailing edge coupons in accordance with the present invention, results in a repaired and upgraded airfoil with extending operating life. As stated on page 12 of the specification, cracking and oxidation of the trailing edge portions of the

nozzle airfoils has been reduced, for example, by a factor of two. The fact that the prior art does not recognize or even suggest the claimed arrangement belies the Examiner's conclusion that one of ordinary skill in the art would have understood that incorporation of current airfoil improvements in prior airfoils which did not originally contain these improvements, would have an economic benefit in increasing operation life. In fact, the invention has not heretofore been put into practice to the best of applicants' knowledge and absent any factual evidence to the contrary in the cited prior art, it must be assumed that the present invention patentably defines over the prior art of record.

It is therefore respectfully requested that the application including remaining claims 1-3 is now in condition for immediate allowance and early passage to issue is requested. In the event, however, any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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